

PRELIMINARY LISTS OF NEW ENGLAND PLANTS,—
XXII.¹

M. L. FERNALD.

[The sign + indicates that an herbarium specimen has been seen;
the sign — that a reliable printed record has been found.]

NAJADACEAE.

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
<i>Najas flexilis</i> (Willd.) Rostk. & Schmidt	+	+	+	+	+	+
“ “ var. <i>robusta</i> Morong				+		
“ <i>gracillima</i> (A. Br.) Magnus				+	+	+
<i>Potamogeton alpinus</i> Balbis	+	+	+	+		+
“ <i>americanus</i> C. & S.	+	+	+	+	+	+
“ “ var. <i>novaeboracensis</i> (Morong) Benn.						+
“ <i>amplifolius</i> Tuckerm.	+	—	+	+	+	+
“ <i>angustifolius</i> Berchtold & Presl			+	+		—
“ “ var. <i>connecticutensis</i> (Robbins) Benn.			+			+
“ <i>bupleuroides</i> Fernald	+	+	+	+	+	+
“ <i>confervoides</i> Reichenb.	+	+	+	+		
“ <i>crispus</i> L.				+		—
“ <i>dimorphus</i> Raf.	+	+	+	+	+	+
“ <i>epihydus</i> Raf.	+	+	+	+	+	+
“ “ var. <i>cayugensis</i> (Wiegand) Benn.	+					+
“ × <i>Faxoni</i> Morong			+			
“ <i>filiformis</i> Pers.	+		+			
“ <i>foliosus</i> Raf.	+	—	+	+	+	+
“ “ var. <i>niagarensis</i> (Tuckerm.) Morong	+	+	+			
“ <i>Friesii</i> Rupr.			+	+		+
“ <i>gemmaiparus</i> Robbins	+			+	+	+
“ <i>heterophyllus</i> Schreb.	+		+	+	—	+
“ “ forma <i>graminifolius</i> (Fries) Morong	+	+	+	+	+	+
“ “ forma <i>longipedunculatus</i> (Merat) Morong	+		+	+	+	+

¹ Printed in RHODORA as supplementary matter.

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
Potamogeton heterophyllus forma maximus Morong	+	+		+		+
“ “ forma myriophyllus (Robbins) Morong	+			+	+	-
“ “ forma terrestris Schlecht.	+		+			+
“ Hillii Morong						+
“ hybridus Michx.	+	+	+	+	+	+
“ “ var. multi-denticulatus (Morong) Asch. & Graebn.						+
“ lateralis Morong				+		+
“ lucens L.	+		+	+		+
“ mysticus Morong				+		
“ natans L.	+	+	+	+	+	+
“ × nitens Weber	+	+		+		
“ Oakesianus Robbins	+	+	+	+	-	+
“ obtusifolius Mertens & Koch	+		+	+		+
“ pectinatus L.	+	+	+	+	+	+
“ perfoliatus L.	+					
“ praelongus Wulfen	+	+	+	+		+
“ pulcher Tuckerm.	+		-	+	+	-
“ pusillus L.	+	+	+	+	+	+
“ “ var. polyphyllus Morong	+			+		
“ “ var. Sturrockii Benn.	+		+	+		+
“ “ var. tenuissimus Mertens & Koch	+	+	+	+		
“ Richardsonii (Benn.) Rydb.	+	+	+			+
“ Robbinsii Oakes	+	+	+	+	+	+
“ rutilus Wolfgang	+		+			
“ × spathaeformis Tuckerm.				+		
“ strictifolius Benn.	+	+	+	+		
“ Vaseyi Robbins	+		+	+		+
“ zosterifolius Schum.	+		+	+	-	+
Ruppia maritima L.	+	-		+	+	+
Zannichellia palustris L.	+	+	-	+	+	+
“ “ var. pedunculata J. Gay				+		
Zostera marina L.	+	-		+	+	-

JUNCAGINACEAE.

Scheuchzeria palustris L.	+	+	+	+	+	+
Triglochin maritima L.	+	-		+	+	+
“ palustris L.	+					

NOTES UPON THE ABOVE LIST.

Potamogeton confervoides Reichenb. This species (as *P. Tuckermani* Robbins) is listed without station in J. L. Bennett's Plants of Rhode Island. There is no specimen in Mr. Bennett's herbarium, and the occurrence of this unique species chiefly in subalpine or very cold ponds indicates that its Rhode Island record is extremely doubtful.

P. perfoliatus L., although reported from all the New England states, has been examined only from Maine. All the material from the other New England states seen by the writer has been either *P. bupleuroides* Fernald or *P. Richardsonii* (Benn.) Rydb.

Many minor hybrids are recognized by Old World students of *Potamogeton*. Little has been done in America to make out our hybrid forms and most such plants are at present omitted from the list.

SUGGESTIONS FOR SPECIAL OBSERVATION.

Najas flexilis (Willd.) Rostk. & Schmidt, var. *robusta* Morong. This extreme form is known in New England only from ponds of eastern Massachusetts. It is found, however, in New York and should be sought in Rhode Island and Connecticut.

Najas guadalupensis (Spreng.) Morong, quickly distinguished from *N. flexilis* by its dull conspicuously reticulated seed, extends northward from Tropical America to eastern Pennsylvania, and has recently been reported from southern New York. It is to be expected in southeastern Massachusetts and Rhode Island.

Potamogeton angustifolius Berchtold & Presl, var. *connecticutensis* (Robbins) Benn. (*P. lucens*, var. *connecticutensis* Robbins) has the 3-keeled fruit of *P. angustifolius* but differs in its greater size, its fruits being 4–4.5 mm. long, while those of *P. angustifolius* are 3–4 mm. long. The variety is known in Vermont and Connecticut, and should be sought in central and western Massachusetts.

P. epihydrus Raf., var. *cayugensis* (Wiegand) Benn. (*P. Nuttallii*, var. *cayugensis* Wiegand) occurs in eastern Maine, in Connecticut, and in Lake Memphremagog, Quebec, and is to be sought in lakes of New Hampshire, Vermont, and western Massachusetts. It differs from the common *P. epihydrus* (*P. pensylvanicus* Willd., *P. Nuttallii*

C. & S.) in its larger floating leaves (29–41-nerved), its broader submersed leaves (9–13-nerved) and its large fruit (3.5–4.5 mm. long).

P. filiformis Pers. occurs locally in northern Maine and northern Vermont. In Maine and Quebec it is apparently confined to shallow ponds and streams with marly bottoms, and it should be sought in such situations in northern New Hampshire.

P. gemmiparus Robbins is frequent in slow streams and pools through southern Maine and it occurs in eastern and central Massachusetts, Rhode Island, and northeastern Connecticut. It should, therefore, be found in southern New Hampshire.

P. heterophyllus Schreb. The different forms are apparently due in great part to the conditions under which they grow and probably are all of more general distribution than the herbaria indicate.

P. interruptus Kit., differing from *P. pectinatus* in its strongly keeled fruit, occurs in brackish waters of eastern New Brunswick and also in Michigan. Search may readily show it to be on the New England coast as well.

P. lateralis Morong, occurring in eastern Massachusetts and in northern Connecticut, is to be sought, naturally, in Rhode Island.

P. obtusifolius Mertens & Koch, frequent in north-central Maine and in Vermont, should be sought in northern New Hampshire. In Maine it prefers clear cold streams.

P. polygonifolius Pourret, a common species of Eurasia, Greenland, and even of Africa and Australia, occurs in Newfoundland and on the coast of Nova Scotia. It has the aspect of a very reduced *P. pulcher*, with extremely slender spikes, the tiny fruits being only 1.5–2 mm. long. It is to be watched for in eastern Maine.

P. pulcher Tuckerm. This distinct species is frequent in eastern Massachusetts, and it is known from southern Maine and from Brattleboro, Vermont (according to Morong). It is, therefore, to be expected in southern New Hampshire.

P. pusillus L., vars. *polyphyllus* Morong and *Sturrockii* Benn., likewise, should be looked for in southern New Hampshire.

P. rutilus Wolfgang, one of our rarest species, is known from the St. Francis River in northern Maine and from a single station in Lake Champlain. It resembles very slender extremes of *P. pusillus*, but has much longer stipules, which are persistent and rather conspicuous; and its sharp-acuminate leaves are almost erect.

P. Vaseyi Robbins is apparently more common than generally supposed and is probably well distributed in southern New England.

Triglochin maritima L., in spite of its usually maritime habitat, is frequent on wet shores and in mossy swamps of northern and north-central Maine and it also occurs in swamps of interior New York. In Aroostook County, Maine, it is associated in Larch and Arbor Vitae Swamps with *Cypripedium hirsutum* Mill, *Valeriana uliginosa* (T. & G.) Rydb., &c., and it may be looked for in similar situations in northern New Hampshire and Vermont.

T. palustris L. is also of wide distribution in Maine. It is a common plant of limy or slightly brackish wet places in the northern section of the state as well as in northern New Brunswick and Quebec; and it follows the coast, in brackish marshes, to Wells, near the New Hampshire border. The species may be confidently sought on the coast of New Hampshire as well as in marly bogs of northern New Hampshire and Vermont.

GRAY HERBARIUM.

MEETING OF THE JOSSELYN BOTANICAL SOCIETY.—The fourteenth annual meeting of the Josselyn Botanical Society of Maine was held at Manset, Mt. Desert Island, Maine, from August 4th to 6th. About a dozen members and guests were present. Unfortunately the weather did not prove as favorable as was hoped, but in other respects the meeting was very successful. Excursions were made to Great Cranberry Island, Bass Harbor, the Sea Wall, Sargent Mountain, Flying Mountain, and Robinson Mountain. The Mt. Desert region is as well studied as any area of similar size in the state, hence it was not expected that any real additions to the local list would be made, save such species as may have been described since the publication of the Flora of Mt. Desert. In this, however, the Society was most agreeably disappointed, and the following species are believed to represent real additions to the flora of the island. I am indebted to Mr. Ora W. Knight for the determination of the Carices.

Carex Bebbii Olney.

“ *lurida* Wahl., var. *gracilis* Bailey.

“ *scoparia* Schkuhr, var. *condensa* Fernald.

“ *vesicaria* L., var. *monile* Fernald.

Vicia tetrasperma L.

Echinospermum Lappula Lehm.

Campanula uliginosa Rydb.

A list of the plants seen or collected during the meeting, containing stations for the rarer species, will soon be issued as Bulletin 2 of the Society.—EDWARD B. CHAMBERLAIN, Cumberland Center, Maine.

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